



Review on Global Energy Transition

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Commentary

The growing concern about climate change has shifted people's attention towards renewable energy encyclopaedically. A green energy transition is still remonstrating off amid the fourth artificial revolution. The green energy transition aims to replace high- carbon reactionary energies with low- carbon clean energy [1]. Clean energy substantially consists of low- carbon renewable energy sources, similar as solar, wind, hydro, bioenergy, geothermal, etc.

Europe has the largest renewable energy consumption share encyclopaedically, with utmost European countries exceeding 20. For illustration, in 2017, renewable energy sources handed 76.7 and 61.2 of the power used in Iceland and Norway, independently. Roughly 88 of Iceland's primary energy consumption came from renewable energy sources that time, with wind and solar together contributing up to 66. Because of its geographical position, Iceland also has abundant hydropower and geothermal coffers. Also, in 2017, Norway powered up 40 of its primary energy consumption with hydropower [2].

In South America, renewable energy consumption, primarily hydro and biofuels, ranked second in the total energy consumption in 2017, with numerous countries reaching 15. In Uruguay, for illustration, renewable energy handed 61 of its energy consumption that time, with biofuels and hydropower contributing 42 and 12, independently. Also, Brazil had 42.3 of its total energy consumption generated by renewable energy sources in the same time, with biofuels counting for further than 30.

In discrepancy, the proportion of renewable energy consumption is fairly small in the Asia-Pacific region. The maturity of Asia-Pacific countries consumed renewable energy at lower than 15 of total energy consumption, with the exception of New Zealand (30.4), Vietnam (25.7), North Korea (25.4), Canada (23.2) and Sri Lanka (22.8). Specifically, New Zealand is located at the junction of the Indian Ocean and Pacific Ocean plates with active crustal movement, and so they've abundant geothermal and hydro energy sources, counting for 29.1 and 12.8 of total energy consumption, independently. In Sri Lanka, nearly 40 of the electricity blend is deduced from hydropower [3]. Although the share of renewable energy consumption in China and the United States is fairly small, both countries are world leaders in renewable power generation capacity. For illustration, in China, as power systems come more intertwined, they're anticipated to regard for 40 of global renewable power generation before 2024. In the United States, the power generation capacity of solar and wind energy is adding time-on-time, and is anticipated to grow by 50 within a decade.

Encyclopaedically, renewable energy is demonstrating a promising instigation. In 2019, worldwide investment in wind power generation totaled US\$138.2 billion and investment in photovoltaic power generation reached US\$131.1 billion. In South America, renewable energy investment surged by 54 over the former time, with Chile and Brazil leading the way. The European wind power request has also grown significantly. In 2020, wind power contributed roughly 57, 32, and 26.4 of the total energy force in Denmark, Ireland, and Portugal, independently [4]. At the same time, in China, the use of fossil energies similar as canvas and coal has been declining in recent times, while

renewable energy consumption, especially hydropower, solar, and wind, continues to rise. At the end of 2019, China's renewable energy installation capacity has reached 7.94 kW, a 9 time on time rise.

Despite the sound progress of global renewable energy investment, there are still issues waiting to be answered. First of all, renewable energy systems involve large outspoken costs and specialized conditions, making them especially challenging for numerous developing countries. The high cost and specialized conditions will largely hamper the energy transition progress. In addition, although the green energy transition has diversified the energy blend, no renewable energy resource has yet held a monopolistic power like fossil energies, leading to a limited proportion of renewable energy in global energy consumption [5]. According to the IEA 2019 report, renewable energy reckoned for slightly 14 of the global energy demand. Thus, it's necessary to explore new openings in current changing global profitable geography.

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Conflict of Interest

None

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